

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 April 2005 (14.04.2005)

PCT

(10) International Publication Number  
**WO 2005/032491 A2**

- (51) International Patent Classification<sup>7</sup>: **A61K**
- (21) International Application Number:  
PCT/US2004/033037
- (22) International Filing Date: 1 October 2004 (01.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/508,607 3 October 2003 (03.10.2003) US
- (71) Applicant (for all designated States except US): **BOARD OF REGENTS, UNIVERSITY OF TEXAS SYSTEM** [US/US]; The Board of Regents, The University of Texas System, 201 West 7th Street, Austin, TX 78701 (US).

TX 78230 (US). KANNAN, Thirumalai, Rengasamy [IN/US]; 7458 Louis Pasteur #303, San Antonio, TX 78229 (US).

(74) Agent: **MYERS BIGEL SIBLEY & SAJOVEC, P.A.**; P.O. Box 37428, Raleigh, NC 27627 (US).

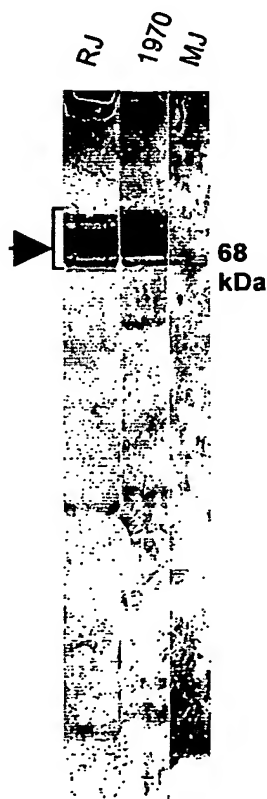
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BASEMAN, Joel, Barry** [US/US]; 11010 Whisper Hollow, San Antonio,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: **METHODS AND COMPOSITIONS FOR MYCOPLASMA PNEUMONIAE EXOTOXINS**



(57) Abstract: The present invention provides a *Mycoplasma pneumoniae* community acquired respiratory distress syndrome (CARDS) toxin, biologically active fragments/domains of the CARDS toxin, antibodies to the CARDS toxin and nucleic acids encoding the CARDS toxin. Also provided are methods of diagnosing, treating and/or preventing infection by *Mycoplasma pneumoniae* using the compositions provided herein.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— *without international search report and to be republished upon receipt of that report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*